

RANCHO SANTA ANA BOTANIC GARDEN
LEAFLETS
of
POPULAR INFORMATION

NUMBER 55

MAY 29, 1942



GODETIA WHITNEYI
LARGE FLOWERED GODETIA

1942

RANCHO SANTA ANA BOTANIC GARDEN
of the
NATIVE PLANTS OF CALIFORNIA
Santa Ana Cañon, Orange County, California
Established 1927 in Memory of
JOHN W. BIXBY

GODETIA WHITNEYI
LARGE FLOWERED GODETIA

Onagraceae

Evening-Primrose Family

An erect or spreading annual with stiff stems $1\frac{1}{2}$ -2 ft. high. Herbage light green, lightly puberulent, especially on external flower parts; stems reddish or light green, the old ones with a tan, exfoliating epidermis. Leaves alternate, those of the suppressed lateral branches appearing fascicled, largest $2\frac{1}{2}$ -4 in. long, $\frac{1}{2}$ - $\frac{3}{4}$ in. wide, lanceolate, short petiolate. Flowers solitary in upper axils, but main axis much shortened, resulting in congested inflorescences containing 4-6 flowers. Buds erect, $1\frac{1}{2}$ in. long, exclusive of the $\frac{1}{2}$ in. long, inferior ovary. As the flower opens the 4, united, green sepals turn to one side and only become completely deflexed if their margins separate. When fully open the flowers are funnel-form, 2-3 or even 4 in. across, but close at night. Each of the 4 petals is cuneate-obovate, $1\frac{1}{2}$ -2 in. long, externally lavender to nearly white, with a large, rich, purple-red blotch or almost wholly purple-red; inner face similar with a smaller blotch. Ring of hairs in calyx tube is less than $\frac{1}{4}$ of distance above its base. Stamens 8, inserted on summit of hypanthium in 2 series, of which the 4 long are alternate with the petals; filaments very pale lavender, flattened, bearing purplish, 2-celled, basi-fixed, curving anthers. Style slightly longer than stamens, bearing a 4-parted stigma $\frac{3}{8}$ in. across. Ovary 4-celled, 8-ribbed, at maturity nearly ribless, about $1\frac{1}{2}$ in. long, $\frac{3}{8}$ in. thick in middle, abruptly tapered to each end, containing numerous, small, brown seeds which are shed only tardily as the capsule splits from the summit. Seedlings have foliar cotyledons, oval blades about $\frac{1}{4}$ in. long, petioles about $\frac{1}{4}$ in. long, and next several pairs of leaves opposite and broadly ovate.

The genus *Godetia*, proposed in 1835 by Spach, honored Charles Godet (Swiss botanist, 1797-1879), and comprises 25 species of western North and South America, of which more than half are found in California. It is closely related to *Clarkia*, from which it may generally be distinguished by its clawless petals. Many fine single and double horticultural forms are known, most of which appear to have been derived from *G. amoena* and *Whitneyi*.

Godetia Whitneyi (in honor of Prof. J. D. Whitney, head of a geological survey of California) was discovered in 1867 by H. N. Bolander (1831-97) at Shelter Cove, Humboldt Co., and was described in 1868 as *Oenothera Whitneyi* by Asa Gray. Seeds collected by Bolander were sent to England where Thompson of the Ipswich Nurseries flowered the species in 1870. From these, J. D. Hooker prepared a description and colored plate in 1870 (Curtis Botanical Magazine, plate 5867). T. Moore, also an English botanist, transferred the species to *Godetia* in 1871. A few years later S. Watson concluded that *G. Whitneyi* was the same as *G. grandiflora* of Lindley (published in 1841 and based upon a specimen by Moreton Dyer from the Columbia River), but this has since been re-

garded as a form of *G. amoena*. As a result our *G. Whitneyi* became known as *G. grandiflora* in botany and in horticulture, and it was not until recently that Dr. C. L. Hitchcock clarified the situation in a paper on the genus (Botanical Gazette **89**: 343. 1930).

Since Bolander's discovery of *Godetia Whitneyi* at Shelter Cove, it has subsequently been obtained there only twice according to botanical records: by Geo. Vasey in 1876, and by F. W. Peirson in 1927. Numerous other botanists, including ourselves, have searched the immediate area around Shelter Cove, but to no avail, and it may well be that the species is now extinct there. However, we have discovered three colonies along the Mendocino Co. coast. The northernmost of these is at the mouth of Juan Creek (discovered in 1934 and propagated since). The second is about 4.5 miles north of Westport (discovered in 1941 and now being propagated). The third is at the mouth of Ten Mile River (discovered in 1941). All of these colonies are small and are confined to the immediate coastal bluffs in association with such common plants as *Erigeron glaucus*, *Heracleum lanatum* and *Baccharis pilularis con-sanguinea*.

We have been growing *Godetia Whitneyi* since 1932 (when we obtained seeds under the name of *G. grandiflora* from Theo. Payne, Los Angeles Wildflower Seedsman). This strain appears to be directly descended from the original stock sent to England by Bolander and produces compact plants with large, brilliant flowers congested at the tips of the branches. In comparison, the plants at Juan Creek and their offspring in the Garden are not so erect and do not have such brilliant flowers. On the other hand, many of the plants at the Westport and Ten Mile River localities are very similar to the "Payne" strain, suggesting to us that in the seventy years that the latter has been in cultivation it has been subjected to some horticultural selection and that the same result could be attained by selection from the three colonies we have discovered.

Propagation of *Godetia Whitneyi* is by seeds which may be broadcast, sown in rows or first grown in flats in the fall or early spring. Under our conditions, fall planting generally produces the best plants, but by any method the blooming season usually begins late in May and continues into early July. For best results a sunny or only partially shaded location is necessary. Any good garden soil except the heaviest clay is satisfactory. Thorough irrigations at frequent intervals to supplement the normal rains will insure large, vigorous plants with numerous flowers. After the plants begin to bloom irrigations should be reduced.

Although we have had more than a dozen distinctive strains of *Godetia* under cultivation, most of which are truly beautiful and worthy of a place in any annual flower garden, *Godetia Whitneyi* has generally been regarded as the choicest of all by our visitors who appreciate its abundant, large and brilliant flowers. It makes a vivid show in a garden and is an excellent cut-flower whose only drawback is that it closes at night.

CARL B. WOLF.

RANCHO SANTA ANA BOTANIC GARDEN

Dedication of Garden Foundation to the Board of Trustees for the Rancho Santa Ana Botanic Garden of the Native Plants of California:

"THE NATURE, OBJECT AND PURPOSE OF THE INSTITUTION
HEREBY FOUNDED AND TO BE MAINTAINED HEREUNDER.

ITS NATURE: A botanic garden of the native plants of California, herbarium and botanical library, containing living and/or preserved specimens of trees, plants and flowers native to California, and literature relating thereto.

ITS OBJECT: The preservation and improvement of the property now transferred and such property as may hereafter be transferred to the Trustees for those who not only wish to enjoy, but to study, assembled in one accessible locality, native California plants; and for the advancement of science and education with reference to plant life indigenous to the State of California.

ITS PURPOSES: (a) An institution founded primarily for scientific research in the field of local botany.

(b) To preserve the native California flora, try to replenish the depleted supply of some of the rarest plants which are rapidly being exterminated, and bring together in a comparatively small area as complete a collection of the rich store of native California plants as can be grown in this southern section of the state, thereby promoting the general welfare of the people of the state by providing the means for encouraging and carrying on the above mentioned activities in said state and by doing such other things as may be necessary and desirable to carry out the objects hereof."

BOARD OF TRUSTEES

ALLEN L. CHICKERING, Chairman, *San Francisco*
SUSANNA BIXBY BRYANT, *San Marino*
STUART O'MELVENY, *Los Angeles*
IRVING M. WALKER, *Los Angeles*
ERNEST A. BRYANT, JR., *Los Angeles*

GARDEN STAFF

SUSANNA BIXBY BRYANT, Managing Director
CARL B. WOLF (Ph.D. Stanford University), Botanist
PERCY C. EVERETT, Superintendent
E. R. JOHNSON, Construction Engineer

Published by the

DR. ERNEST A. BRYANT GARDEN PUBLICATIONS FUND
RANCHO SANTA ANA BOTANIC GARDEN
R. F. D. Anaheim, California